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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,087	02/06/2004	Maung W. Han	ALPINE.042AUS	7144

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EXAMINER	
MANCHO, RONNIE M	

ART UNIT	PAPER NUMBER
3663	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,087	HAN, MAUNG W.	
	Examiner	Art Unit	
	Ronnie Mancho	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-8, 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al (6640185).

Regarding claim 1, Yokota et al (col. 5, lines 2-30; col. 15, lines 1-19; fig. 1A, 1B, figs. 4, 12B, 19; col. 8, lines 44-60; col. 9, lines 33-44) disclose a display method for a navigation system, comprising:

receiving a scroll signal from an input device operated by a user for scrolling a screen of a navigation system (102, fig. 6);

detecting a condition in which blank scroll will arise when the screen is scrolled, where the blank scroll is a situation of the screen which does not show any visible object thereon when the screen is scrolled (fig. 12B; note also applicant's background section of the prior art);

reading map data ahead in a scroll direction to find any visible object when the blank scroll condition is detected (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10);

evaluating each shape point that defines a shape of a visible object to determine whether any part of the visible object should come within a display range of the screen when the screen is

further scrolled in the scroll direction (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10); and

immediately displaying (see applicant's pages 3 and 4. Displaying is understood to mean that the display window is scrolled or changed to open into another display window, or zoomed, wherein a location is displayed) a location which shows the visible object without showing a blank screen when it is determined that any part of the visible object should come within the display range (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10).

Yokota did not particularly recite a blank scroll screen; however Yokota teaches of scrolling the screen of the navigation system to section which is blank. It is noted that any portion of the screen can be scrolled in any desired direction and also zoomed (see abstract; col. 5, lines 1-21; col. 8, lines 26-35; fig. 6) as desired by the user. Col. 15, lines 1-19; fig. 12B indicates that a user scrolls the screen and puts the cursor 87 on an area of the screen where there are no roads or objects or Point Of Interest (POI) icons. This situation is interpreted as the "detecting a blank scroll screen" as claimed. The area around the blank scroll area can be further scrolled and zoomed as desired so as to display shape points that define a shape point of a visible object such as a (POI) that is located near the blank scroll area of the screen. Thus the location of the POI is a location which shows a visible object without showing a blank scroll screen within the display range of the screen.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to scroll the screen to a section which is blank and to zoom an area in the

vicinity of the blank scroll screen to find visible objects and roads thereby facilitating an easy maneuver in an area with no roads or in an off road situation.

Regarding claim 2, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, wherein said step of detecting the blank scroll condition includes a step of scanning the screen to see if there is any color difference on the screen, and if there is not a sufficient color difference, it is determined that the blank scroll condition exists.

Regarding claim 3, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, wherein said step of detecting the blank scroll condition includes a step of examining map data for the screen to see if there is any data showing a visible object within the display range of the screen, and if there is not the map data showing the visible object, it is determined that the blank scroll condition exists.

Regarding claim 4, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, further comprising a step of repeating said steps of reading the map data ahead in the scroll direction to find any visible object and evaluating a shape point of a visible object until a visible object that should come within the display range is detected.

Regarding claim 5, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, further comprising a step of stop scrolling the screen even if the scroll signal is provided by the user, a step of repeating said steps of reading the map data ahead in the scroll

direction to find any visible object and evaluating a shape point on a visible object until a visible object that should come within the display range is detected, thereby immediately displaying the location which shows the visible object within the display range without showing a blank screen.

Regarding claim 6, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, wherein said step of reading the map data ahead in the scroll direction includes a step of determining the scroll direction based on the scroll signal generated by the input device.

Regarding claim 7, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, wherein said step of evaluating the shape point of the visible object includes a step of drawing lines from the screen defining a display range of the screen if the screen is scrolled in the scroll direction and a center line from a center of the screen toward the scroll direction.

Regarding claim 8, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, wherein said step of evaluating the shape point of the visible object includes a step of evaluating a plurality of shape points of the visible object to determine which part of the visible object should come within the display range when the screen is scrolled in the scroll direction.

Regarding claim 11, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose a display apparatus for a navigation system, comprising:

means for receiving a scroll signal from an input device operated by a user for scrolling a screen of a navigation system;

means for detecting a condition in which blank scroll will arise when the screen is scrolled, where the blank scroll is a situation of the screen which does not show any visible object thereon when the screen is scrolled;

means for reading map data ahead in a scroll direction to find any visible object when the blank scroll condition is detected;

means for evaluating each shape point that defines a shape of a visible object to determine whether any part of the visible object should come within a display range of the screen when the screen is further scrolled in the scroll direction; and

means for immediately displaying a location which shows the visible object without showing a blank screen when it is determined that any part of the visible object should come within the display range.

Regarding claim 12, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, wherein said means for detecting the blank scroll condition includes means for scanning the screen to see if there is any color difference on the screen, and if there is not a sufficient color difference, it is determined that the blank scroll condition exists.

Regarding claim 13, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, wherein said means for detecting the blank scroll condition includes means for examining map data for the screen to see if there is any data showing a visible object within the display range of the screen, and if there is not the map data showing the visible object, it is determined that the blank scroll condition exists.

Regarding claim 14, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, further comprising means for repeating said processes of reading the map data ahead in the scroll direction to find any visible object and evaluating a shape point of a visible object until a visible object that should come within the display range is detected.

Regarding claim 15, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, further comprising means for stopping the screen scroll even if the scroll signal is provided by the user, means for repeating said processes of reading the map data ahead in the scroll direction to find any visible object and evaluating a shape point of a visible object until a visible object that should come within the display range is detected, thereby immediately displaying the location which shows the visible object within the display range without showing a blank screen..

Regarding claim 16, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, wherein said means for reading the map data ahead in the scroll direction

includes means for determining the scroll direction based on the scroll signal generated by the input device.

Regarding claim 17, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, wherein said means for evaluating the shape point on the visible object includes means for drawing lines from the screen defining a display range of the screen if the screen is scrolled in the scroll direction and a center line from a center of the screen toward the scroll direction.

Regarding claim 18, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, wherein said means for evaluating the shape point of the visible object includes means for evaluating a plurality of shape points of the visible object to determine which part of the visible object should come within the display range when the screen is scrolled in the scroll direction.

3. Claims 9, 10, 19, 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al in view of Adachi (6662101).

Regarding claim 9, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display method for a navigation system as defined in claim 1, but did not disclose evaluating an angle, alpha made by the first line, an angle beta made by a second line, and an angle .theta. of the scroll direction. However, Aduchi (figs 6-10) disclose a navigation system wherein a step of evaluating a shape point of a visible object includes a step of drawing a first line from one corner of the screen which is one end of the

display range to the shape point and a second line from another corner of the screen which is another end of the display range to the shape point, and a step of evaluating an angle alpha. made by the first line, an angle beta made by the second line, and an angle .theta. of the scroll direction for determining whether the shape point will be within a display range when a screen scroll is continued.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yokota device as taught by Adachi for the purpose of obtaining an intercept azimuth.

Regarding claim 10, Adachi et al disclose the display method for a navigation system as defined in claim 9, wherein said step of evaluating the angles includes a step of determining that the shape point will not come within the display range if a relationship of "alpha.>theta. and beta.>theta." or "alpha.<theta. and beta.< theta." is satisfied.

Regarding claim 19, Yokota et al (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10) disclose the display apparatus for a navigation system as defined in claim 11, but did not disclose evaluating an angle .alpha. made by the first line, an angle beta made by a second line, and an angle .theta. of the scroll direction. However, Aduchi (figs 6-10) disclose a navigation system wherein a means for evaluating a shape point of a visible object includes means for drawing a first line from one corner of the screen which is one end of the display range to the shape point and a second line from another corner of the screen which is another end of the display range to the shape point, and means for evaluating an angle alpha. made by the first line, an angle beta. made by the second line, and an angle theta of the scroll

direction for determining whether the shape point will be within the display range when the screen scroll is continued.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Yokota device as taught by Adachi for the purpose of obtaining an intercept azimuth.

Regarding claim 20, Adachi et al disclose the display apparatus for a navigation system as defined in claim 19, wherein said means for evaluating the angles includes means for determining that the shape point will not come within the display range if a relationship of alpha.>theta. and beta.>theta, or alpha.<.theta and beta.<theta is satisfied.

4. Claims 1-8, 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokota et al (6640185) in view of Cochlovius (2003/0120423)

Assuming in arguendo that Yokota does not disclose detecting a blank scroll screen, it is believed that Yokota as modified by Cochlovius et al disclose anticipate the claims.

Regarding claim 1-8, 11-18, Yokota et al (col. 5, lines 2-30; col. 15, lines 1-19; fig. 1A, 1B, figs . 4, 12B, 19; col. 8, lines 44-60; col. 9, lines 33-44) disclose a display method for a navigation system, comprising:

receiving a scroll signal from an input device operated by a user for scrolling a screen of a navigation system (102, fig. 6);

evaluating each shape point that defines a shape of a visible object to determine whether any part of the visible object should come within a display range of the screen when the screen is further scrolled in the scroll direction (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10); and

immediately displaying (see applicant's pages 3 and 4. Displaying is understood to mean that the display window is scrolled or changed to open into another display window, or zoomed, wherein a location is displayed) a location which shows the visible object without showing a blank screen when it is determined that any part of the visible object should come within the display range (col. 4, lines 1-28, col. 5, lines 2-30; col. 8, lines 44-60; col. 9, lines 33-44; col. 10, lines 3-10).

Assuming that Yokota did not disclose a blank scroll screen, Cochlovius et al (fig. 2-4; sec. 0007, 0017 to 0019) teaches of:

detecting a condition in which blank scroll will arise when the screen is scrolled, where the blank scroll is a situation of the screen which does not show any visible object thereon when the screen is scrolled (note applicant's background section of the prior art);

reading map data ahead in a scroll direction to find any visible object when the blank scroll condition is detected.

Cochlovius et al (fig. 2-4; sec. 0007, 0017 to 0019) *teach of scrolling the screen of the navigation system to section which is blank. It is noted that any portion of the screen can be scrolled in any desired direction and also zoomed (see sec. 0019) as desired by the user. Figs. 3-5 show areas on a screen with no roads or any objects. The area is interpreted as a blank area. Thus when the user scrolls the screen to a blank area the area is zoomed to show no map. Thus a blank scroll screen is detected by Cochlovius as claimed. The blank scroll area is then zoomed as desired so as to display shape points that define a shape point of a visible object such as roads, hills, POI that are located near the blank scroll area of the screen. Thus the location*

of the roads, hills, POI is a location which shows a visible object without showing a blank scroll screen within the display range of the screen.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yokota as taught by Cochlovius for the purpose of facilitating an easy maneuver in an area with no roads or in an off road situation.

Response to Arguments

5. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Communication

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ronnie Mancho
Examiner
Art Unit 3663

1/16/2008

SUP...